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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/099,954	03/19/2002	Kazuhisa Mori	500.41483X00	6337
20457	7590 07/11/2003			
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800			EXAMINER	
			LAXTON, GARY L	
ARLINGTON	I, VA 22209-9889		ART UNIT	PAPER NUMBER
•			2838	
•			DATE MAILED: 07/11/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

			1.	<i>y</i> /			
		Application No.	Applicant(s)				
		10/099,954	MORI ET AL.				
	Offic Action Summary	Examiner	Art Unit				
		Gary L. Laxton	2838				
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the	correspondence address				
THE - Exter after - If the - If NC - Failu - Any r	ORTENED STATUTORY PERIOD FOR REPL'MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. In period for reply specified above is less than thirty (30) days, a reply or to reply is specified above, the maximum statutory period or to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be to within the statutory minimum of thirty (30) dawill apply and will expire SIX (6) MONTHS from to become ABANDON	imely filed ys will be considered timely. In the mailing date of this communication. ED (35 U.S.C. § 133).				
1)	Responsive to communication(s) filed on	<u> </u>					
2a) <u></u> □	This action is FINAL . 2b)⊠ Th	nis action is non-final.					
3)□	Since this application is in condition for allow closed in accordance with the practice under	ance except for formal matters, p <i>Ex parte Quayle</i> , 1935 C.D. 11,	prosecution as to the merits is 453 O.G. 213.				
·	ion of Claims						
4)⊠	Claim(s) <u>1-16</u> is/are pending in the application						
_	4a) Of the above claim(s) is/are withdra	wn from consideration.					
•	Claim(s) <u>1-11,13 and 14</u> is/are allowed.						
	Claim(s) <u>12,15 and 16</u> is/are rejected.						
•	Claim(s) is/are objected to.						
-	Claim(s) are subject to restriction and/o	or election requirement.					
• •	ion Papers The energification is objected to by the Examine	ar	•				
	The specification is objected to by the Examine The drawing(s) filed on is/are: a) ☐ acce		aminer				
اسارها							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.							
٠٠/	If approved, corrected drawings are required in re		•				
12)	The oath or declaration is objected to by the Ex						
Priority	under 35 U.S.C. §§ 119 and 120						
-	Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C. § 119	(a)-(d) or (f).				
-	⊠ All b) Some * c) None of:						
	1. Certified copies of the priority documen	ts have been received.					
	2. Certified copies of the priority documents have been received in Application No						
	3. Copies of the certified copies of the pricapplication from the International But	ureau (PCT Rule 17.2(a)).					
	See the attached detailed Office action for a list						
	Acknowledgment is made of a claim for domest						
15) <u> </u>	 The translation of the foreign language pr Acknowledgment is made of a claim for domes 	ovisional application has been re tic priority under 35 U.S.C. §§ 1	eceived. 20 and/or 121.				
Attachme							
2) Noti	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) rmation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>:</u>	5) Notice of Informa	ary (PTO-413) Paper No(s) al Patent Application (PTO-152)				
10.0-1-1	T						

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DETAILED ACTION

Specification

- 1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
- 2. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 12, 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Koichi (JP7170723 supplied by applicant).

Concerning claim 12, Koichi discloses a power converter comprising: a semiconductor circuit including a first semiconductor switching device (figures 1-7: 1) and a second semiconductor switching device (2) each having a main terminal and a control terminal, and electrically connected to each other; a main circuit wiring including a plurality of tabular conductors (figure 5: 4, 5, 6) arranged at least in partially superposed relation with each other, a main circuit current

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of said semiconductor circuit flowing in said main circuit wiring; a first control signal line (14) for supplying a first control signal to said control terminal of said first semiconductor switching device (1); and a second control signal line (14) for supplying a second control signal to said control terminal of said second semiconductor switching device (2); wherein respective junction (figure 2 or 7: 16 or 17 or 18) between each of said first and second control signal lines (14) and the circuit portion of said semiconductor circuit is in opposite relation to selected one of an area of said main circuit wiring where said main circuit current flows and said plurality of said tabular conductors are in superposed relation to each other, and wherein that portion of each of said first and second control signal lines which is in opposite relation to only one of said tabular conductors with said main circuit current flowing therein, is constituted of selected one of a twisted wire and a shielded wire (figure 2 or 7: 14).

Concerning claim 15, Koichi discloses a power converter comprising: a semiconductor circuit including a semiconductor switching device (1 or 2) having a main terminal and a control terminal; a main circuit wiring (4, 5, 6) including a plurality of tabular conductors arranged at least in partially superposed relation to each other (4, 5, 6), the main circuit current of said semiconductor circuit flowing in said main circuit wiring; and a control signal line (14) for supplying a control signal to said control terminal of said semiconductor switching device; wherein each junction between said control signal line and the circuit portion of said semiconductor circuit (figure 2 or 7: 16 or 17 or 18) is in opposite relation to selected one of an area of said main circuit wiring where said main circuit current flows and said plurality of said tabular conductors are in superposed relation with each other; and wherein the portion of said control signal line which is in opposite relation to only one of said tabular conductors in which

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the main circuit current flows, is formed of selected one of a twisted wire and a shielded wire (figure 2 or 7: 14).

Concerning claim 16, Koichi discloses a power converter comprising: a semiconductor circuit including a semiconductor switching device(figures 1-7: 1 or 2) having a main terminal and a control terminal; a main circuit wiring (4, 5, 6) including a plurality of tabular conductors arranged at least in partially superposed relation to each other (4, 5, 6) the main circuit current of said semiconductor circuit flowing in said main circuit wiring; and a control signal line (14) for supplying a control signal to said control terminal of said semiconductor switching device; wherein said control signal line (14) crosses an end of an area of said main circuit wiring where said main circuit current flows and said plurality of said tabular conductors are in superposed relation to each other (figure 2 or 7), between the side of said main circuit wiring (4, 5, 6) where said semiconductor switching device (1 or 2) is located and the opposite side of said main circuit wiring (figure 2 or 7).

Allowable Subject Matter

- 5. Claims 1-11, 13 and 14 are allowed.
- 6. The following is a statement of reasons for the indication of allowable subject matter:

Concerning claims 1-11, prior art fails to disclose or suggest, inter alia, a power converter wherein the sum of the length of that portion of each of a first control signal line and a second control signal line which is opposite to an area of a main circuit wiring where the main circuit

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current flows and where a plurality of said tabular conductors are in superposed relation to each other, the length of that portion of each of the first control signal line and the second control signal line in opposite relation to an area of the main circuit wiring where main circuit current does not flow, and the length of that portion of each of the first control signal line and the second control signal line which is located outside an end of the main circuit wiring, is substantially equal to the total wiring length of each of the first control signal line and the second control signal line.

Concerning claim 13, prior art fails to disclose or suggest, inter alia, power converter; wherein the length of that portion of each of said first and second control signal lines which is in opposite relation to an area of the main circuit wiring where main circuit current flows and a plurality of tabular conductors are in superposed relation with each other, is substantially equal to the total length of the corresponding one of the first and second control signal lines; and wherein the sum of the length of that portion of each of the third and fourth control signal lines which is in opposite relation to an area of the main circuit wiring where main circuit current does not flow and the length of that portion of the corresponding one of said third and fourth control signal lines which is located outside an end of the main circuit wiring, is substantially equal to the total length of a corresponding one of the third and fourth control signal lines.

Concerning claim 14, prior art fails to disclose or suggest, inter alia, a power converter; wherein the sum of the length of that portion of a control signal line which is in opposite relation to an area of a main circuit wiring where main circuit current flows and where a plurality of tabular conductors are in superposed relation with each other, the length of that portion of the control signal line which is in opposite relation to an area of the main circuit wiring where main circuit

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current does not flow, and the length of that portion of said control signal line which is located outside an end of the main circuit wiring, is substantially equal to the total wiring length of the control signal line, and wherein that portion of the control signal line which is in opposite relation to only one of the tabular conductors in which main circuit current flows, is formed of selected one of a twisted wire and a shielded wire.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the 7. examiner should be directed to Gary L. Laxton whose telephone number is (703) 305-7039. The examiner can normally be reached on Monday thru Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (703)308-1680. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7724 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

GLL June 30, 2003

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